

REMARKS

Claims 1-24 are all the claims pending in the application. Claims 14-24 have been newly added herewith.

Claim Objections

The Examiner objects to claims 1, 2, 4, 5, 10 and 11 for various informalities. Applicants have amended the claims in a manner believed to overcome the objection. With regard to claims 4 and 5, Applicants submit that the recitation of a middle body “extending from a toe side of a side portion to a heel side of the side portion through a crown portion ...” is clear as written and that it is not necessary to include the word “and” after the word “portion”.

Claim Rejections - Yang and Chuang

Claims 1, 4, 7, 9, 12 and 13 stand rejected under 35 U.S.C. §102(e) as being anticipated by Chuang (U.S. 2005/0159243). Claims 1, 2, 6 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yang (U.S. 2005/0026719).

The present application claims priority from Japanese Patent Application No. 2003-020670, which was filed on January 29, 2003. Chuang was filed on January 15, 2004 and Yang was filed on August 1, 2003. Therefore, both Chuang and Yang were filed after the filing date of the Japanese priority document for the present application. Applicants are submitting herewith a Certified English Translation of the JP 2003-020670 priority document, thereby removing Chuang and Yang as a prior art references.

Claim Rejections - Tsuchida and Mules

A) Claim 4

Claim 4 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Tsuchida (U.S. Patent No. 5,255,913). Applicants respectfully traverse.

Claim 4 recites a middle body extending from a toe side of a side portion to a heel side of the side portion through a crown portion. In contrast to claim 4, the alleged Tsuchida middle body (crown portion 5) does not include any part of a side portion of the golf club head, and certainly not the toe 6 or the heel 7. Accordingly, Tsuchida lacks a middle body as claimed and claim 4 is allowable over Tsuchida.

B) Claim 5

Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsuchida (U.S. Patent No. 5,255,913). Applicants respectfully traverse this rejection.

Claim 5 sets forth particular ranges of thicknesses for the front, middle and back bodies. The Examiner acknowledges that Tsuchida lacks the specified thicknesses, but asserts that it would have been obvious to have modified Tsuchida to meet the claimed invention. However, the Examiner fails to provide motivation for modifying Tsuchida to meet the claimed dimensions.

Tsuchida provides thicknesses for shell 11 (which constitutes the Examiner's alleged front body 2 and back body 3) which are substantially different than the claimed thicknesses. Specifically, Tsuchida teaches a shell 11 thickness of 4 to 12 mm (*see* column 2, lines 46-48), while claim 5 recites front and back body thicknesses of 0.8 to 1.2. Thus, by teaching a range substantially larger than the claimed invention, Tsuchida specifically teaches away from the

claimed invention. Since Tsuchida teaches away from the claimed thickness range, it would not be modified to include the claimed thicknesses.

Furthermore, the Examiner states that Tsuchida recognizes that the thickness affects the elastic modulus. However, the Examiner does not indicate how that would lead to the claimed range. In fact, nothing in Tsuchida suggests an elastic modulus and material that would meet the claimed thicknesses. Accordingly, claim 5 is allowable over Tsuchida.

C) Claims 1, 10 and 11

Claims 1, 10 and 11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Mules (U.S. Patent No. 708,575). Applicants respectfully traverse.

Claim 1 recites that the material of the middle body has a lower longitudinal elastic modulus and specific gravity than the material of the front and back bodies. The Examiner asserts that the alleged Mules middle body is made of an elastic material, while the front body is made of metal and the back body is made of wood. The Examiner further asserts that because these materials are used for the Mules club, it would necessarily have the claimed relationships of specific gravity and elastic modulus. Applicants disagree.

The Examiner provides no evidence supporting his assertion that the Mules club would necessarily have the claimed relationship of material properties. In fact, contrary to the Examiner's assertions, the Mules alleged middle body would not necessarily have a lower longitudinal elastic modulus and specific gravity than the material of the front and back bodies. That is, there is no indication that the Mules resilient material (middle body) would have a lower specific gravity than wood (back body). For example, if the Mules middle body were

manufactured with rubber (specific gravity of 1.52) and the back body were made of red oak (specific gravity 0.71) the middle body would have a higher, not lower, specific gravity than the back body. Therefore, the Mules middle body would not necessarily have a higher specific gravity than the back body as asserted by the Examiner.

The Examiner alternatively proposes that it would have been obvious to adjust Mules to meet the claimed invention. However, there is absolutely no motivation for modifying Mules to meet the claimed invention. Claim 1 recites that the middle body has a lower specific gravity and elastic modulus than the materials of the front and back bodies. Mules teaches nothing about these features. There is no teaching or suggestion to even evaluate these features, let alone to adjust them so as to meet the claimed invention. Accordingly, the Examiner's assertion that it would have been obvious to adjust Mules is improper and clearly based on improper use of hindsight.

Claim 1 also recites a hollow golf club head, whereas Mules appears to be a solid club head. This is a clear difference, yet the Examiner is completely silent in this regard.

In view of the above, Applicants submit that claim 1 is allowable over Mules.

Claims 10 and 11 depend from claim 1 and are therefore allowable at least because of their dependency.

New Claims

Claims 14-24 have been newly added herewith in order to provide a more varied scope of protection. Claims 14-20 and 22-24 depend from one of claims 1, 4 and 5 and are therefore allowable at least because of their respective dependencies. As discussed above, claim 21 is a new independent claim for covering the embodiment of Figs. 2(a)-2(c). Claim 21 is allowable at

least because Tsuchida does not teach or suggest a middle body which is disposed in at least part of a side portion and tapers between a top and a bottom of the club head as recited in claim 21.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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Date: July 17, 2006